CommuniKeys™

No. A-248
Instructional Computing Courseware
for Apple® II Series Computers

for the love of learning

mecc®

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This manual is compatible

with

the ***CommuniKeys*** disk

Version 1.x

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Printed in the United States of America

ISBN 0-87490-718-7

October 1989
Latest Printing: February 1992

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Library of Congress Cataloging-in-Publication Data

CommuniKeys [computer file]. — Version 1.0.

2 computer disks : col. ; 5 1/4 in. + 1 manual.
System requirements: Apple II series; 128K; ProDOS; assembly; 1 disk drive; monochrome or color monitor; Apple-compatible printer (recommended).
Title from title screen.
Edition statement from disk label.
Copy-protected.
Second disk is backup.
Audience: Children (grades 3-6).
Issued also on 3 1/2 in. computer disk.
Summary: Presents an elementary, language-based keyboarding package with modeling, lessons, activities, and feedback. Lessons contain only real high-frequency words and lead to activities in which those new skills can be applied; the activities have applications outside "keyboarding" for teachers to reinforce language arts skills.
"A-248"— Disk label.
1. Electronic data processing—Keyboarding—Study and teaching—Software. I. Minnesota Educational Computing Corporation.
QA76.9.K48C65 1989 004.7'6 89-35921
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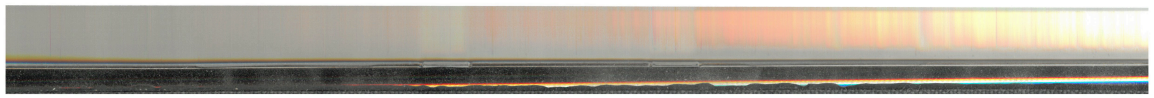

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	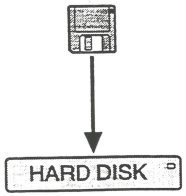	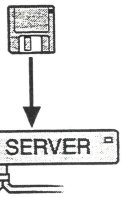	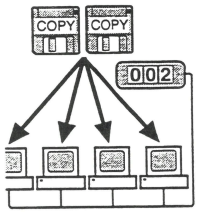
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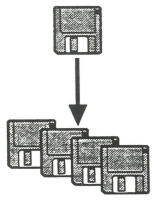	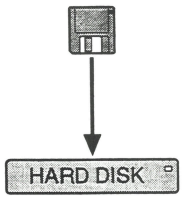	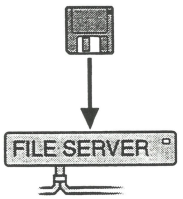
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	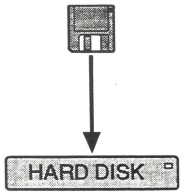	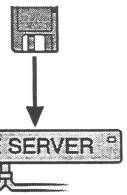
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	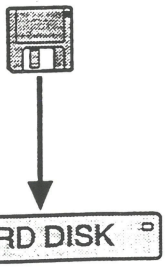	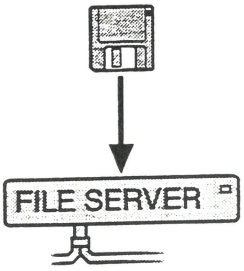	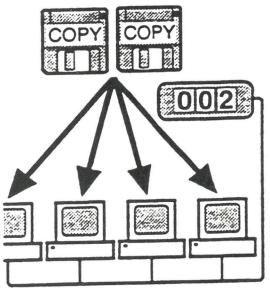
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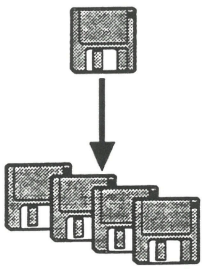	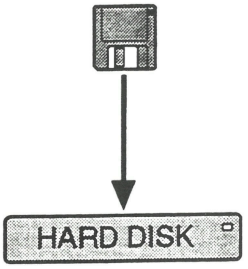	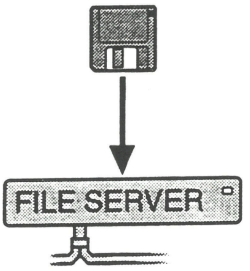
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	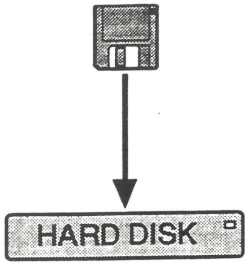	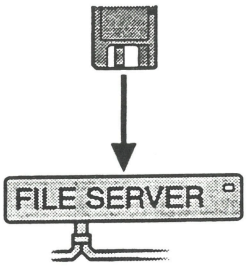
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TABLE OF CONTENTS

Introduction 1

A Language-Based Approach 2

Background on Current Keyboarding Research 3

Keyboarding and the Elementary Student 4

The Product at a Glance 5

Using ***CommuniKeys*** 6
- Lesson Chart 12
- Activities 13
- Management Options 19

Answers to Questions 24

Use in an Instructional Setting 28
- ***CommuniKeys*** and Your Language Arts Program 28
- Preparing Your Students for ***CommuniKeys*** 28
- Using Activities in Your Language Arts Program 29
- Using Expeditions in Your Language Arts Program 30

Appendices
- A Note to Parents 33
- Sample Keyboards 34
- Earthwatch Expeditions 36
- Bibliography 37
- Credits 39

INTRODUCTION

CommuniKeys is a language-based keyboarding program for third- to sixth-grade students. It introduces good keyboarding technique in lessons consisting of real words and sentences based on high-frequency vocabulary and reinforces keyboarding in activities that emphasize language skills.

CommuniKeys consists of two instructional programs that rely on recent research in both keyboarding and language arts. Unlike many keyboarding programs that introduce and practice keystrokes using nonsense patterns such as "fgf dfd," the first program, **Lessons**, provides guided practice in target keys with words and sentences. Students progress by using individual performance as a goal for each successive lesson. At regular intervals, as students complete groups of keys, they learn a little more about the expedition and gain access to new activities.

The second set of programs, **Activities**, provides practice and application of keyboarding skills in games and language arts activities. Early activities are based on keyboarding skills (BBox, Odd One Out, Scramble, etc.), and later activities are based on language arts activities (What Can It Be?, Listmaker, Starters, Letter, etc). Students gain access to activities as they come to milestones in the introduction of keys. After they have "earned" an activity through the lessons, they have access to it at any time by selecting the Activities option from the main menu.

Management Options are a significant feature of ***CommuniKeys***. Teachers can set instructional variables and review student records. These records consist of current key, best typing speed, and best accuracy. Variables include speed goal (5 to 40 words per minute), accuracy goal (1 to 4 errors), language level (normal/advanced), and mastery (1 to 5 words or sentences typed at the current speed and accuracy goal).

A LANGUAGE-BASED APPROACH

A language-based approach assumes that elementary students are developing language skills and that keyboarding will be used in the context of language arts skills development. Such an approach assumes that keyboarding is a means to an end and therefore should be introduced as students begin word processing and other communicative computer activities. Therefore, our approach uses meaningful materials that emphasize words and sentences rather than nonsense sequences. These materials are more interesting and should add to the students' motivation. They contain larger numbers of different letter sequences, have greater transfer value, and emphasize letter sequences that naturally occur in English.

A language-based approach has several advantages:

- It introduces keys by the frequency in which they occur, not by position and finger.

  We based the order of lessons on two things. First, we looked at each key's frequency of occurrence and the number of high-frequency words that contain that key and any previously learned. Second, we considered its ease of reach and how the sequence of keys reinforces good keyboarding technique and position.

- It integrates keyboarding in reading, writing, and spelling skills.

  Keyboarding lessons take into account the kinds of vocabulary encountered in the language arts lessons and focus on actual words and sentences. Two language levels contain appropriate vocabulary: "normal" for third- and fourth-grade reading levels and "advanced" for reading levels for the fifth grade and up.

- It moves from motor tasks to meaningful language arts activities.

  Lessons lead to activities that reinforce the development of language arts skills and support the elementary language arts curriculum. These activities do not analyze students' typing performance, but allow them to explore the new skills they are working on. *Communicative activities practice composing skills, rather than copying skills.*

  At the earlier levels, we provide language arts games that focus on specific keys. As students progress in the lessons, we add a variety of language arts activities that represent steppingstones to word processing and composition: brainstorming, list making, letter writing, journal entry, form and sentence completion, and storytelling.

- It provides motivational and informative feedback.

  Feedback is based on student keyboarding. We analyze speed and accuracy but do not emphasize errors in the messages to students. Feedback is positive and encouraging.

BACKGROUND ON CURRENT KEYBOARDING RESEARCH

Current research on keyboarding emphasizes five points:

- Learning to type is, in part, a kinesthetic experience.

  Traditional exercises introduce keys by finger and row position. A language-based approach introduces proper position, correct stroking, and finger/key locations in the context of high-frequency words and patterns. The order of introduction of keys is based on the frequency of occurrence in language and the ability to compose meaningful words, phrases, and sentences with each new key.

- Good keyboarding technique is the foundation for later gains in speed and accuracy.

  Almost all typing/keyboarding programs focus on proper touch-typing technique — posture, hand position, and correct stroking—and so should a language-based approach. Traditional keyboarding exercises oppose "peeking" and are designed to duplicate the experience of a typist/stenographer typing from handwritten notes so that attention is directed to the notes, not to the keyboard.

- At the start, speed should come before accuracy.

  To help them master the "feel" of the keyboard, focus the students initially on attaining speed and allow for errors. Beginning keyboarding should focus on attaining an acceptable minimum speed while learning new keys. After all keys have been mastered, particular exercises can help students attain greater speed and accuracy.

- Speed should be set below the students' maximum speed.

  Pacing encourages the development of skills within a range of speeds below the students' best speed. Learning new keystrokes in this environment allows for some errors but emphasizes both acceptable speed and speed increases. Arcade-type games in keyboarding packages encourage "all-out" speeds that hinder skill development.

- Immediate knowledge of results is a vital condition for learning.

  Students will be motivated to acquire new skills in an environment in which their performance is reported to them on a regular and timely basis. Feedback provides immediate goals that motivate students.

KEYBOARDING AND THE ELEMENTARY STUDENT

Research on elementary keyboarding bears out these points:

- Students associate composing skills with handwriting.

  Students often associate their skill as writers with their ability to produce clear and legible handwriting. With 15 to 30 hours of instruction, students can improve their keyboarding skills enough so that they are more efficient and faster writers at the computer than they are with handwriting. Handwriting skills average five words per minute in third grade, and typing skills (following instruction) average 10 to 20 words. As a result, students write more and longer and disassociate handwriting from composing.

- Insufficient instruction does not produce automatic touch-typing.

  Allowing students to compose without keyboarding instruction can lead to the development of bad habits. Instructors must provide individual assistance and advice. Without continued practice, students may quickly lose acquired skills.

- Elementary keyboarding needs to motivate students.

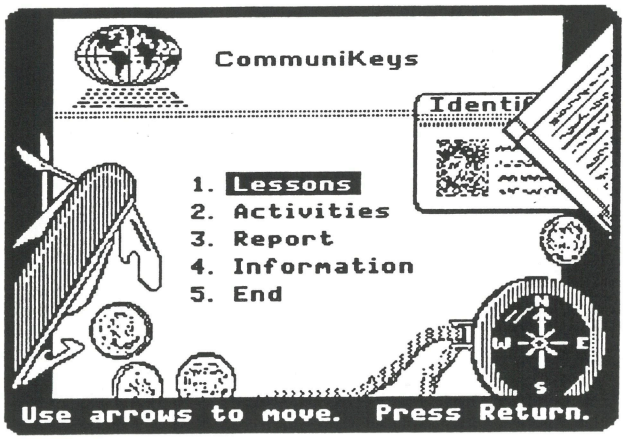
  Students are more motivated if they can choose the type and level of lesson. Activities should contain real language usage. Students should receive immediate feedback about their performance.

- Elementary keyboarding needs to support language arts skills.

  Elementary keyboarding cannot exist in isolation. It is most effective when explicitly integrated with activities in reading, writing, and spelling.

  Elementary students are developing language skills. They improve these skills when activities in reading and writing are combined with personal, communicative language activities. Keyboarding instruction for this age should incorporate tactics for integrating language skills.

THE PRODUCT AT A GLANCE



Title: *CommuniKeys*

Grade: 3-6

Subject area: Keyboarding, language arts

Program type: Guided practice

Hardware: Apple II series computer with 128K RAM (not an Apple II or II Plus); printer optional, but recommended

Classroom use: Individual students

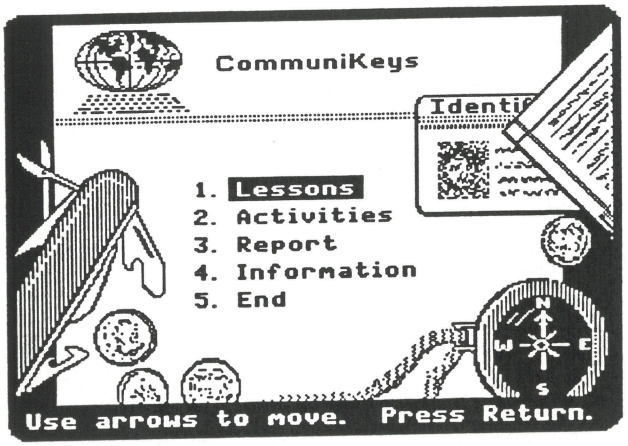
Management Options:

- Select course settings for language, speed, accuracy, and mastery levels.
- See and print student records.
- Specify printing options and printer setup.

Learning objectives:

- Learn and practice proper keyboarding technique.
- Reinforce language arts skills by using appropriate vocabulary, sentences, and writing activities.

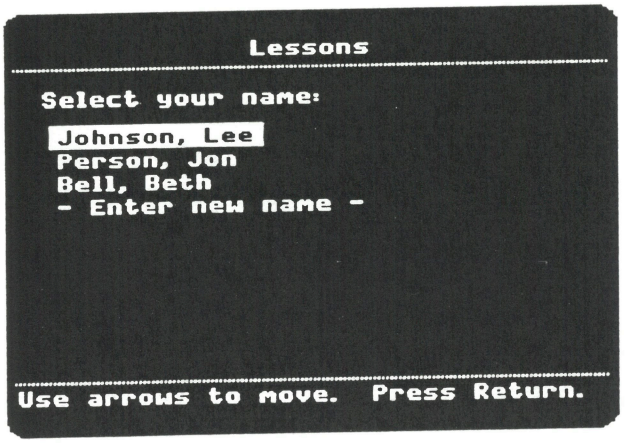
USING COMMUNIKEYS



To begin the keyboarding lessons, select the first option, Lessons, from the main menu.

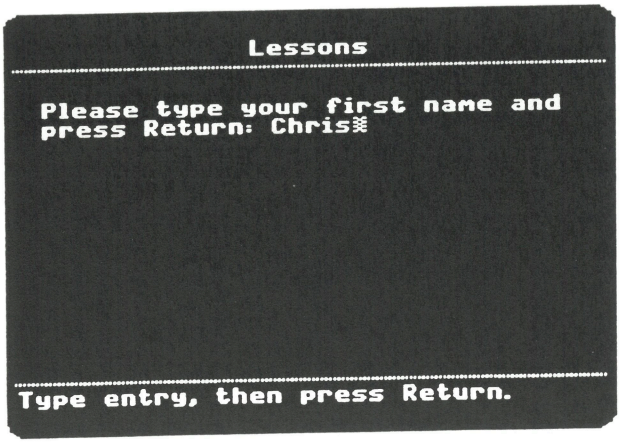
Activities are earned as you progress through all the lessons. If you wish to see a demonstration of all the activities, press Control-D.

Report shows students their keyboarding progress and a certificate if they have completed the keyboard expedition.



If there are student records on the disk, you will be shown a list of students for whom records exist. If your name appears on the list, use the arrow keys to highlight it and then press the Return Key.

If your name is not on the list and you select the Enter New Name option, or if there are no student records on the disk, you will be prompted to enter your name.



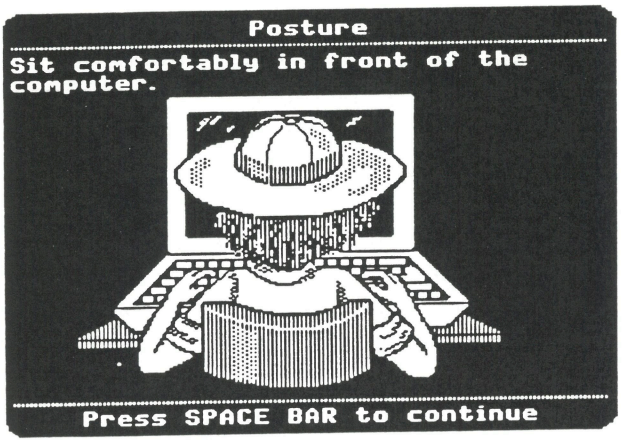
Carefully spell your first name exactly as you will want it listed and then press the Return Key. Do the same for your last name.

If you are a new student, you will go to the introductory lesson. If your name was on the list, you will go to the lesson key where you last were.

Welcome to CommuniKeys!
You will go on an expedition and use a computer to share what you learn. First, you will learn about keyboarding and your expedition.
When you finish, you will write your first journal entry.
Press SPACE BAR to continue

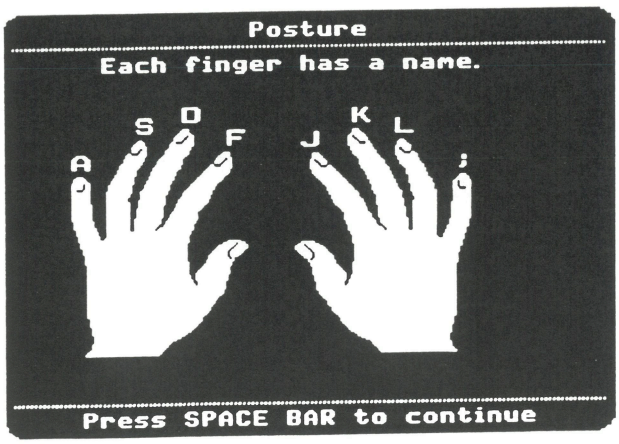
You are introduced to ***CommuniKeys***, the keyboarding lessons, and the idea of expeditions.

The "expedition" theme will show up continually in lessons and in activities.



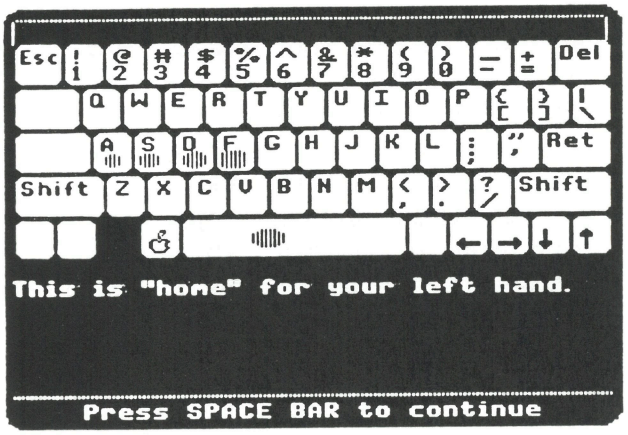
The introductory lesson covers posture, hand and finger position, command keys (the Space Bar and the Return, Escape, and Delete Keys), and the home row.

This introductory lesson can also be found by selecting the Information option from the main menu and then the Keyboard Introduction option.

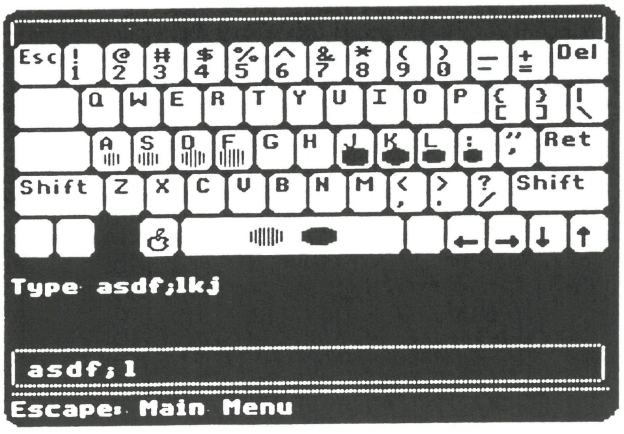


In ***CommuniKeys***, the fingers are called by their home row location. For example, your right, index finger is called the "J" finger and your left, little finger is called your "A" finger. Younger students will need to be introduced to the ";" key and its name (the "semi-colon").

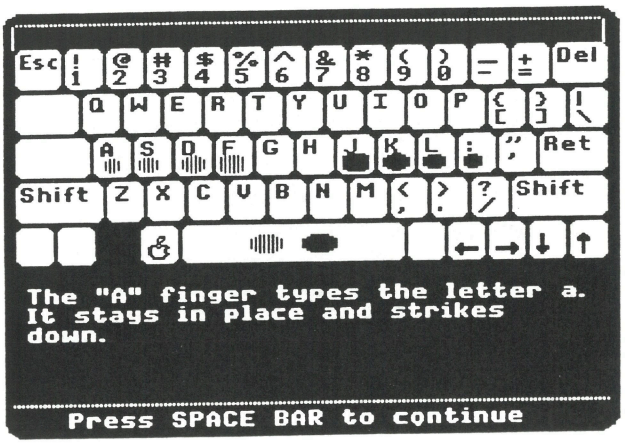
You are introduced to the Space Bar and the Return, Escape, and Delete Keys. You will be told what these command keys do in ***CommuniKeys***, where they are on the keyboard, and which finger types each key. You will be prompted to press each key. All other keys are inactive.



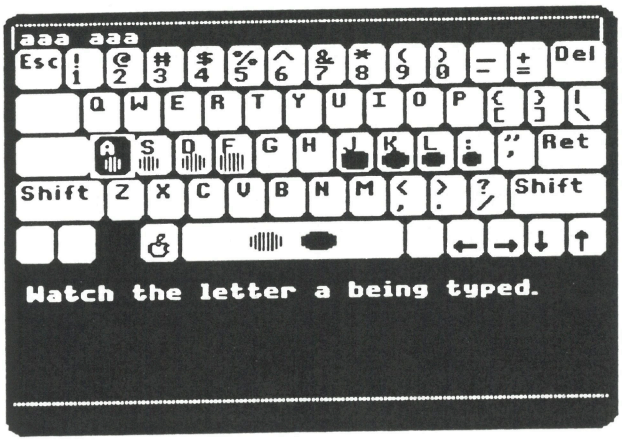
In the introductory lesson, you are also introduced to the placement of the fingers on the home row key. Each key is highlighted in turn and you will be asked to place your finger on the key and press it. When you have pressed the correct key, a finger icon will stay on that key. The finger icons are used throughout the program to demonstrate and model the correct fingering.



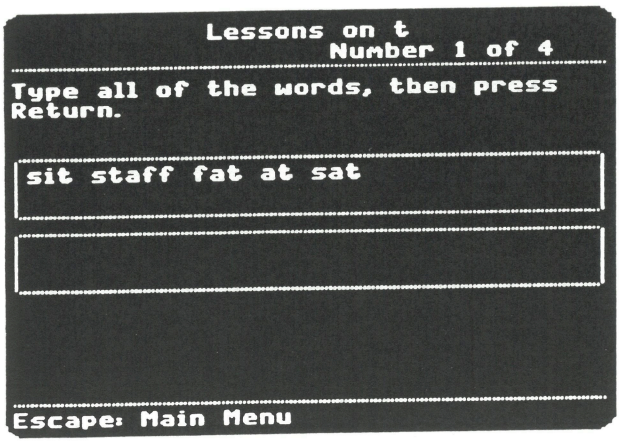
You will be asked to type the home row keys in a variety of patterns: "asdf;lkj jkl;fdsa". While you are practicing the home row, only the home row key next in the sequence will work. All other keys are inactive.



In the first lesson, you will learn the keys "a," "s," "i," "f," and "t." For each letter covered in ***CommuniKeys***, you will first learn what finger strikes the key.

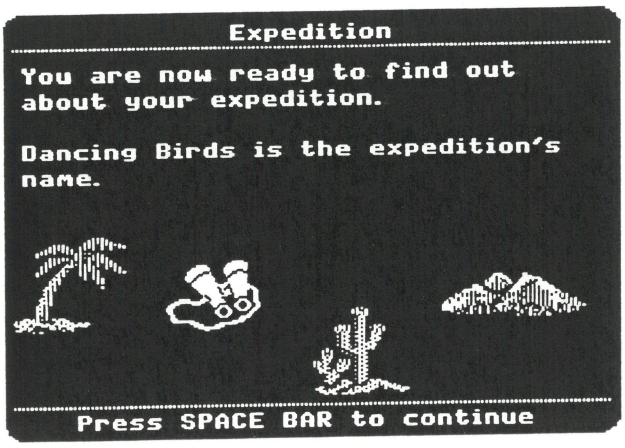


For each new key learned, you will watch how it is typed with the correct finger icon. The key is pressed with the finger icon and highlighted at the same time. The finger icon types the key in a sequence and the typing is displayed in the box at the top of the screen. For keys off the home row, this sequence is Home Row Key, New Key, Home Row Key, Space, New Key, Home Row Key, New Key. After a key has been modeled, you will be prompted to type the new key in a sequence.

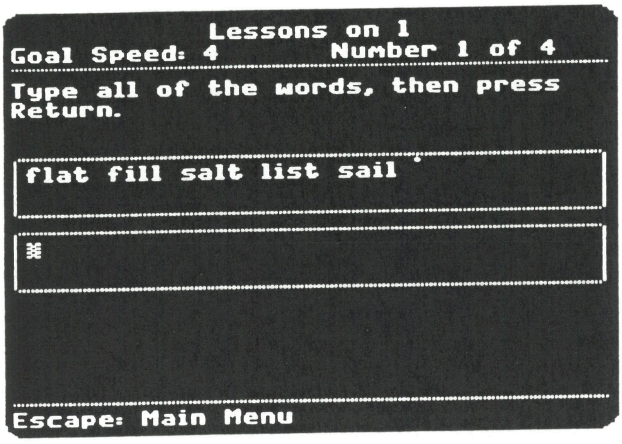


When you have learned how to type the new key, you will learn to type it by using words that practice the new key. The upper window contains words to type. You copy what is in the upper box in the lower box.

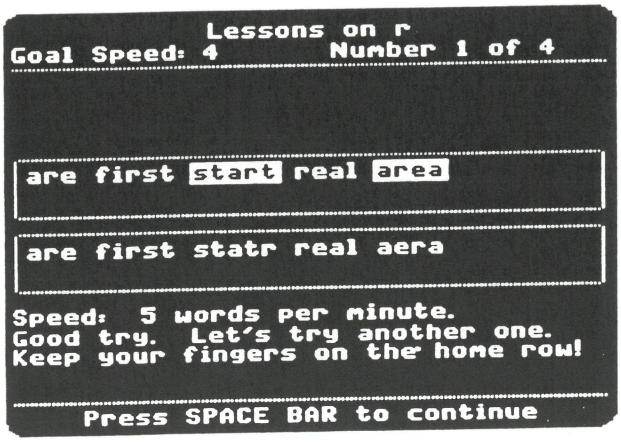
Words contain the target key and any key previously learned. Words come from a normal or advanced set of vocabulary words selected in Management Options. You can quit the **Lessons** program at any time by pressing the Escape Key. Your place in the lessons will be automatically saved.


Expedition
You are now ready to find out about your expedition.
Dancing Birds is the expedition's name.
Press SPACE BAR to continue

When you have learned the first set of keys, you will find out the name of your expedition. An expedition name is randomly assigned to each student and cannot be changed. Your expedition form will display all of the current information. As you learn more keys, you will learn more information (location, topic, and project) about your expedition.



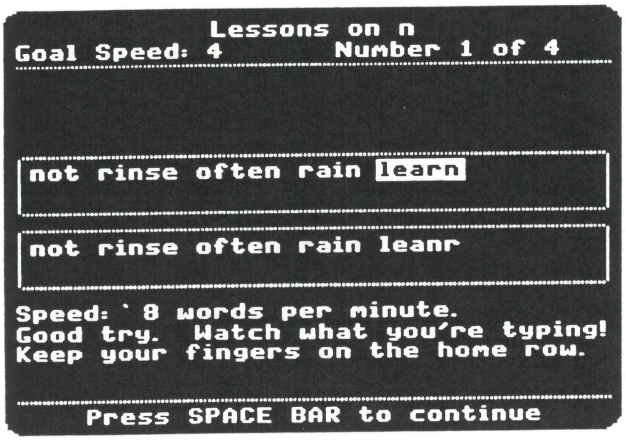
Next, you will learn a new set of keys ("l," "e," "k," "r," and ","). Again, you will learn what finger strikes the key, watch how it is done, and then type the new key. Then, you will practice words with each new key. There are no words to practice with the comma.


Lessons on r
Goal Speed: 4 Number 1 of 4
are first start real area
are first statr real aera
Speed: 5 words per minute.
Good try. Let's try another one.
Keep your fingers on the home row!
Press SPACE BAR to continue

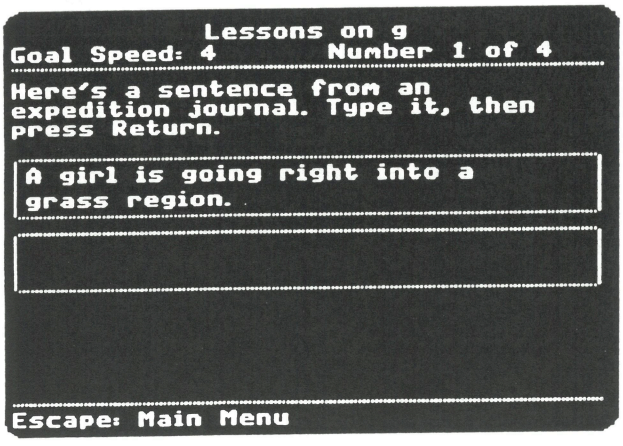
Beginning with lessons on "t," you will receive feedback on your speed. Words that are missed are highlighted in the upper window. The goal speed is displayed in the upper left corner. The number of lesson items completed is displayed in the upper right corner. You will also always receive written feedback. A rising tone indicates when an item matches or exceeds the speed and accuracy goals.

All errors with one word are counted as one error. Each instance of an extra character or group of extra characters is counted as an error.

When you have learned the second set of keys, you will find out the location of your expedition.


Lessons on n
Goal Speed: 4 Number 1 of 4
not rinse often rain learn
not rinse often rain leanr
Speed: 8 words per minute.
Good try. Watch what you're typing!
Keep your fingers on the home row.
Press SPACE BAR to continue

After learning where your expedition will take place, you will go on to the third set of keys ("hon. <shift> g"). Each key practices new words.


Lessons on g
Goal Speed: 4 Number 1 of 4
Here's a sentence from an expedition journal. Type it, then press Return.
A girl is going right into a grass region.
Escape: Main Menu

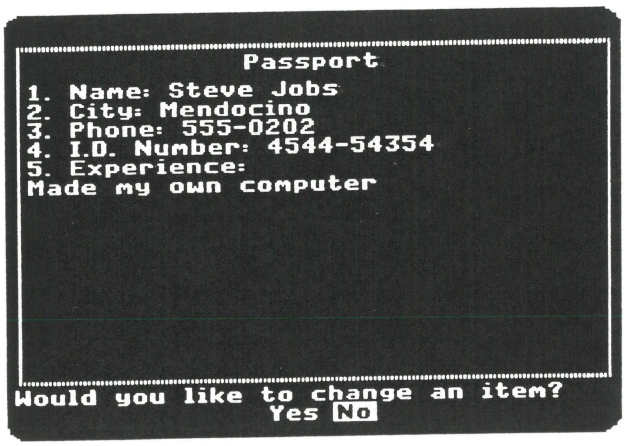
When you have finished practicing words with "g," you will practice typing sentences with "g" words in them. From now on, each new letter will have practice words and sentences. Sentences will always come from an expedition journal.

USING COMMUNIKEYS (continued)

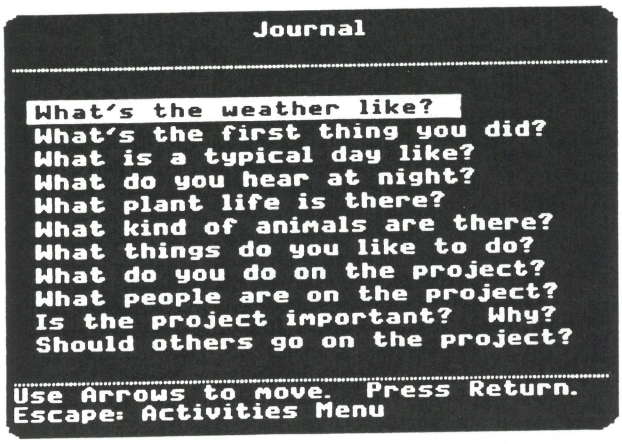
Lesson Chart

	Order of Keys in Group	Expedition Event	Notes on Group
1	a s i f t	Expedition Name	On completion, BBox added to Activities. Words begin with "t."
2	l e k r ,	Expedition Location	
3	h o n . <shift> g	Expedition Topic	Sentences begin with "g."
4	d u v m ?	Expedition Month	On completion, Odd One Out added to Activities. No words for question mark.
5	y b p ' "	Expedition Project 1	No words for single or double quote.
6	j w c !	Expedition Project 2	On completion, Scramble added to Activities. No words for exclamation.
7	x z q ; :	Expedition Project 3	On completion, Listmaker added to Activities. No words for colon and semi-colon.
8	12345 67890	Passport	Letter, What It Can Be?, Stories, Starters, and Passport added to Activities.
9	@ # $ % & / * - () =+ < >[]	Journal	Journal added to Activities. No words for special characters.
		Certificate	

Activities



When you have practiced the number keys, you will complete your passport. Fill in the blanks with whatever information you want. When you finish practicing the last item, you will be asked whether you want to change any of the items in the passport or print it before quitting. Passport, What Can It Be?, Letter, Stories, and Starters are added to the Activities menu at this time.


Journal
What's the weather like?
What's the first thing you did?
What is a typical day like?
What do you hear at night?
What plant life is there?
What kind of animals are there?
What things do you like to do?
What do you do on the project?
What people are on the project?
Is the project important? Why?
Should others go on the project?
Use Arrows to move. Press Return.
Escape: Activities Menu

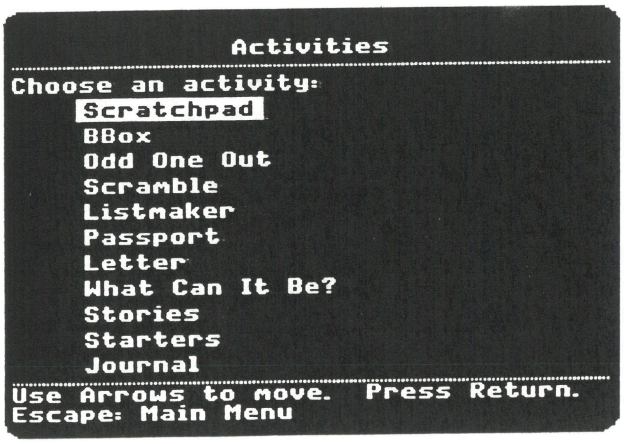
When you have practiced the symbol keys, you will fill out your journal. Select a question you'd like to write about. Use the arrow keys to scroll through the list and press the Return Key when the question you want is highlighted.

After selecting a question, type a journal entry. If you don't like the question you've selected, press the Escape Key to return to the list. When you finish your entry, press the Return Key. It is also added to the Activities menu.

Certificate
Beth has finished training for the CommuniKeys expedition, "Pink Flamingo", with a best speed of 136 words per minute. Beth has finished 5 expeditions so far.
Signature
Do you want to print this? Yes No

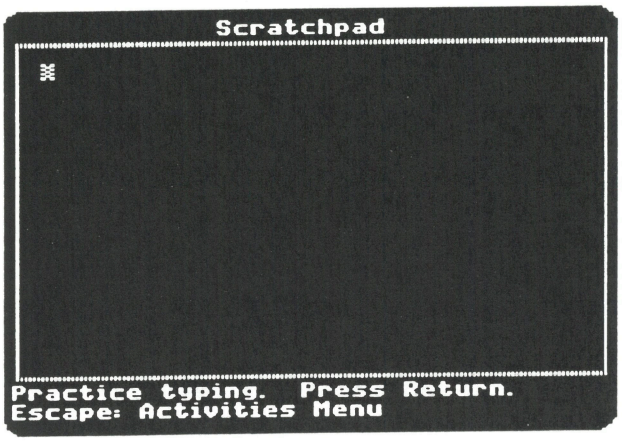
Next, you will see your certificate. Your name, expedition, and best typing speed are displayed. You can see the certificate by selecting Reports from the main menu and pressing the Space Bar at your report. Your certificate will record how many expeditions you have gone on.

You will return to the **Lessons** program, where you will practice for speed and accuracy. When you type two words per minute faster than your last goal, you will find out about your new expedition. "Continued use" includes both normal and advanced vocabulary.



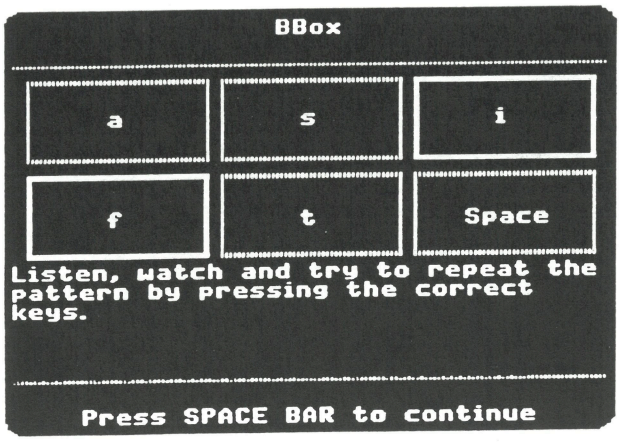
You can use an activity by selecting the second option, Activities, from the main menu and then selecting your choice from the list of available activities. All the activities available to you are displayed on the Activities menu. Select an activity with the arrow keys and then press the Return Key.

All the activities will be listed. As you progress through the lessons, activities are added to the Activities menu. Initially, only Scratchpad is available.

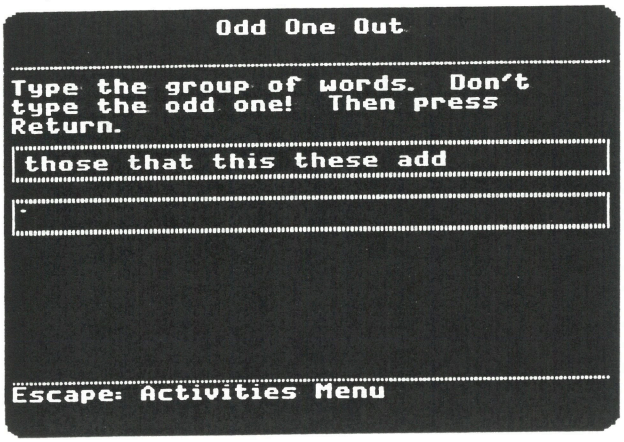


Scratchpad is available from the beginning. If it is the only activity, you will not see the Activities menu. When you select the Activities option from the main menu, you will go directly to Scratchpad.

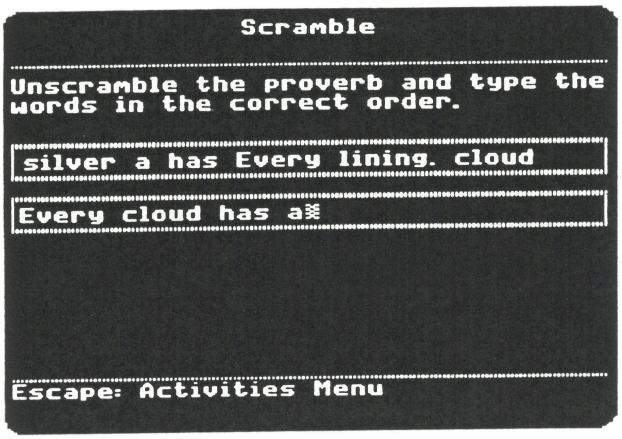
You can type up to 15 lines of text. When you press the Return Key, the speed in words per minute is displayed in the upper left corner of the screen. Use Scratchpad for testing your copying skills or for typing tests of your own material.



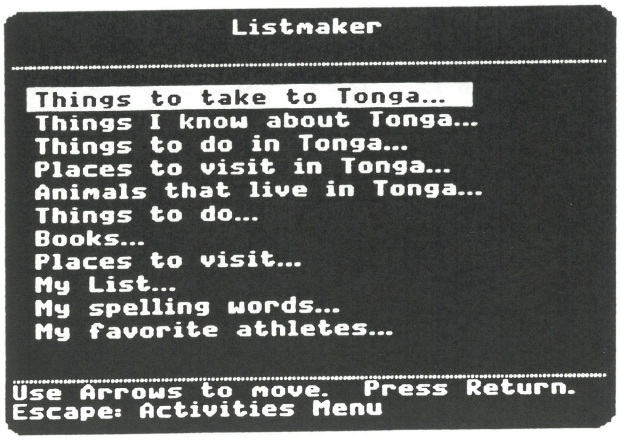
When you have practiced the first set of keys ("a," "s," "i," "f," and "t"), you can advance to the BBox pattern-matching game. You will see and hear patterns and try to match the sequence by typing the right letters. You can turn off the sound by pressing Control-S.


Odd One Out
Type the group of words. Don't type the odd one! Then press Return.
those that this these add
Escape: Activities Menu

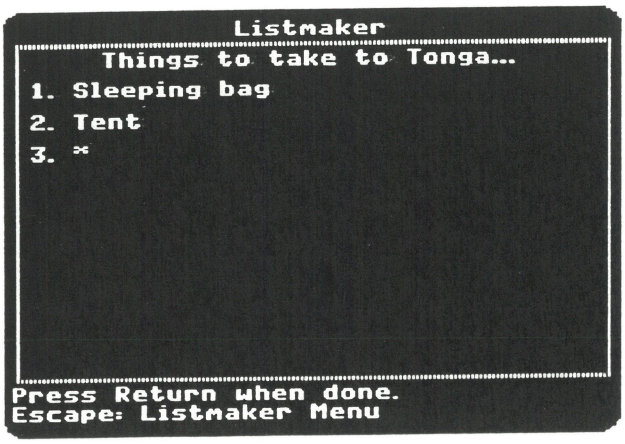
After practicing the next set of keys ("d," "u," "v," "m," and "?"), you can play Odd One Out. You will see a set of words that belong to a group. One of the words is not in the group. Type the words without the Odd One and then press the Return Key. See how many in a row you can get right.


Scramble
Unscramble the proverb and type the words in the correct order.
silver a has Every lining. cloud
Every cloud has a
Escape: Activities Menu

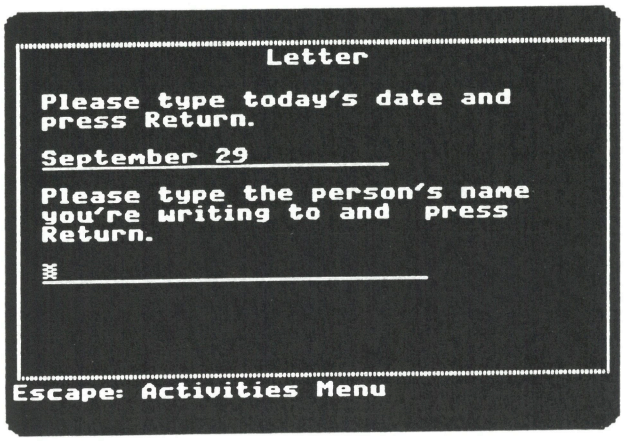
Scramble is added to your Activities menu after you have finished practicing the set of keys ("j," "w," "c," and "!"). The words to a well-known proverb are all mixed up and you should retype the proverb in the right order.



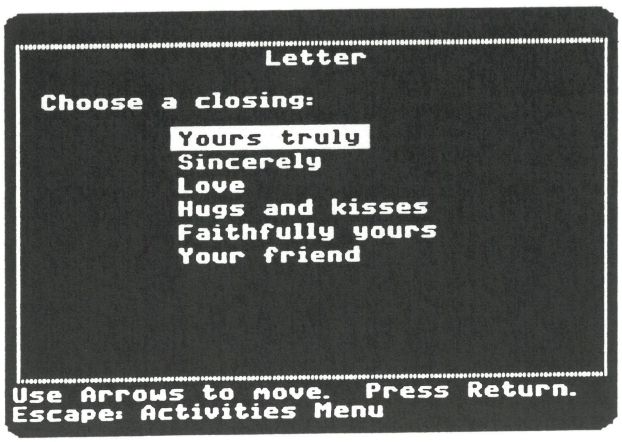
Listmaker is added after you have practiced the last set of alphabetic keys ("x," "q," "z," ":," and ";"). Select one of the list topics by using the arrow keys and pressing the Return Key.



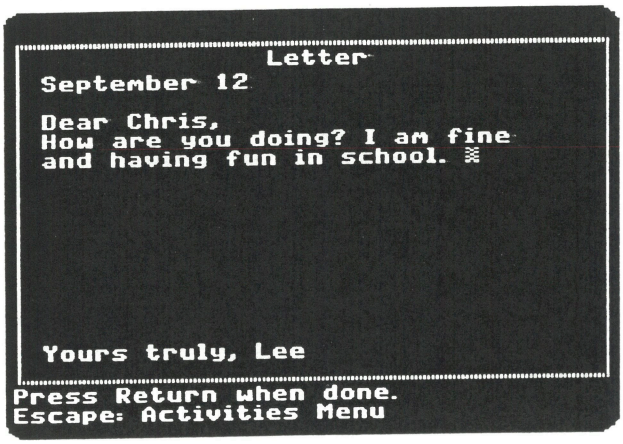
Your list is created in the typing space. You can organize your ideas and create lists. After each item in the list, press the Return Key. The next item will automatically be numbered for you. Listmaker contains eight items. After the eighth one, or whenever you press the Return Key on a blank item, you will be asked whether you want to change an item. If you select Yes, you will be asked which number. You can then change the item in your list.


Letter
Please type today's date and press Return.
September 29
Please type the person's name you're writing to and press Return.
Escape: Activities Menu

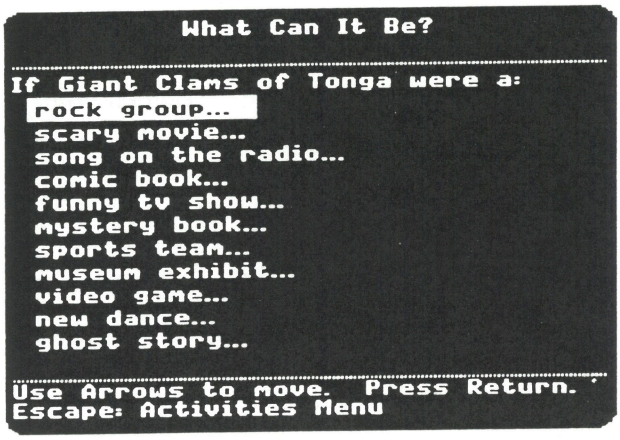
After practicing the number keys, you can write your first letters. Enter a date in any format you want and press the Return Key. Then, type the name of the person to whom you are writing.



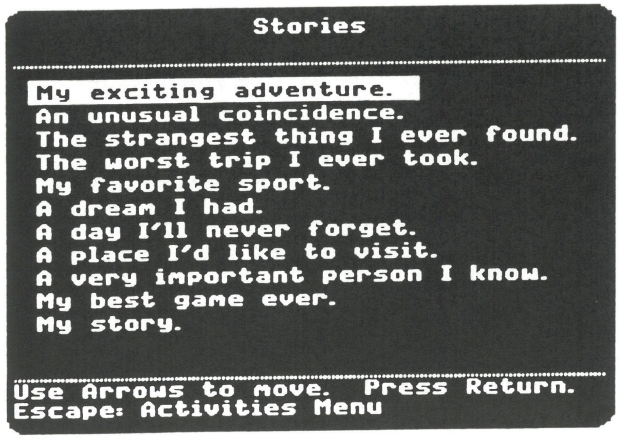
When you have entered the date and name, you can select the closing (salutation). Use the arrow keys to highlight the closing you want and press the Return Key.



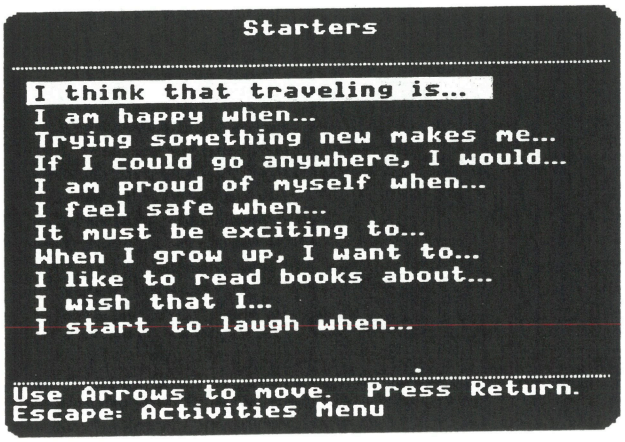
When you have selected a salutation, you will see the body of the letter. You can type whatever you want in the body of the letter and can use Letter to write all kinds of short letters. Press the Return Key when you are finished.



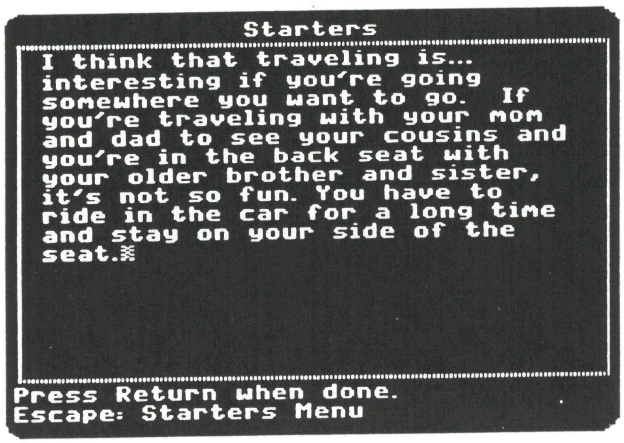
When you have practiced the number keys, a creative writing activity, What Can It Be?, will be added to your Activities menu. In this activity, you will select one of the topics related to your expedition name. Use the arrow keys and press the Return Key to select the topic you want. Once you have selected a topic, use the typing space to write your ideas.


Stories
My exciting adventure.
An unusual coincidence.
The strangest thing I ever found.
The worst trip I ever took.
My favorite sport.
A dream I had.
A day I'll never forget.
A place I'd like to visit.
A very important person I know.
My best game ever.
My story.
Use Arrows to move. Press Return.
Escape: Activities Menu

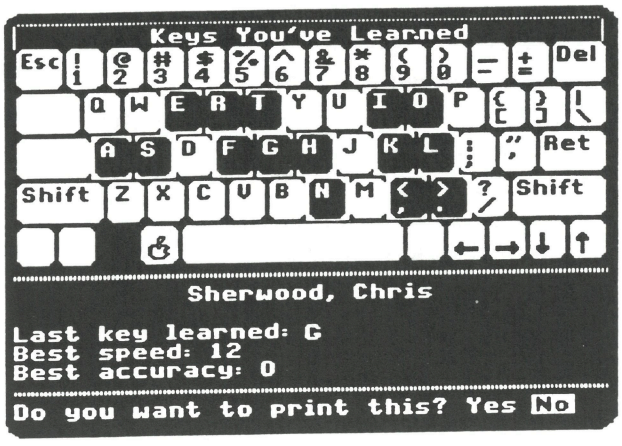
Stories is added to the Activities menu at the same time as What Can It Be?. Stories begins with some story titles. Select one by using the arrow keys and pressing the Return Key. When you press the Return Key, you will go to the typing space and finish the story.


Starters
I think that traveling is...
I am happy when...
Trying something new makes me...
If I could go anywhere, I would...
I am proud of myself when...
I feel safe when...
It must be exciting to...
When I grow up, I want to...
I like to read books about...
I wish that I...
I start to laugh when...
Use Arrows to move. Press Return.
Escape: Activities Menu

When What Can It Be? is added to the Activities menu, two other creative writing activities are also added. In Starters, you can practice typing the endings for sentence beginnings. Select a Starter from the list by using the arrow keys and pressing the Return Key. When you press the Return Key, you will go to the typing space and finish the sentence.


Starters
I think that traveling is...
interesting if you're going
somewhere you want to go. If
you're traveling with your mom
and dad to see your cousins and
you're in the back seat with
your older brother and sister,
it's not so fun. You have to
ride in the car for a long time
and stay on your side of the
seat.
Press Return when done.
Escape: Starters Menu

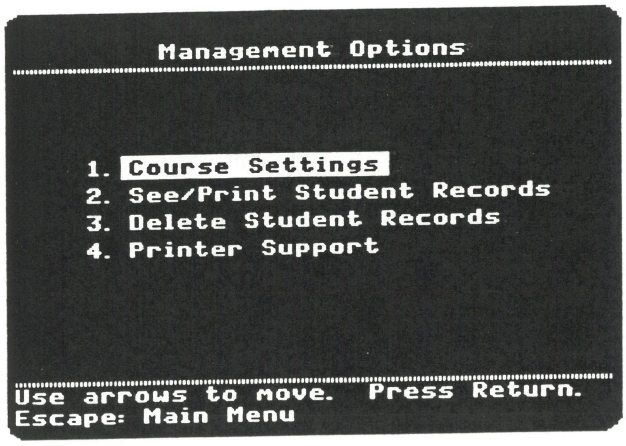
Each of the creative writing activities, What Can It Be?, Stories, and Starters, uses a typing space that is identical to the Journal typing space. You can type up to ten lines of text. Delete characters by using the Delete Key or the Left Arrow Key.



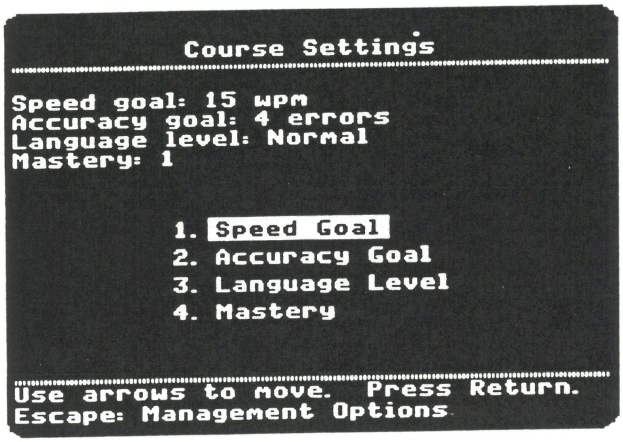
A report of your performance and progress is always available. Select the third option, Reports, from the main menu. Keys that you've learned are highlighted, and information about the last key learned, your speed, and your accuracy is given. While learning keys, the speed is set to the lowest possible that meets your performance goals.

In continued use, the speed is set to the highest possible that meets your performance goals.

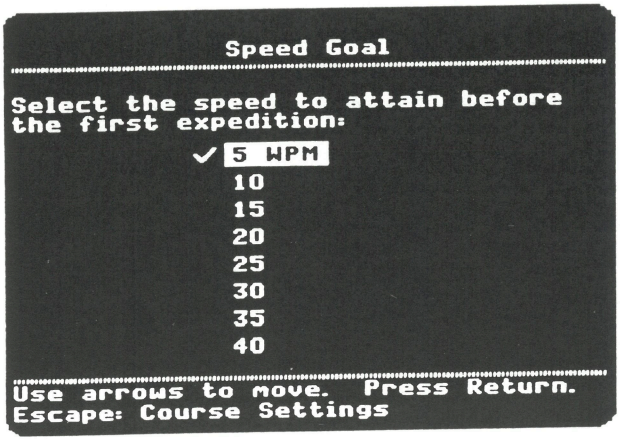
Management Options



Access the Management Options from the main menu by typing Control-A. These options allow teachers to set instructional variables, work with student records, delete data, and specify information about the printer.

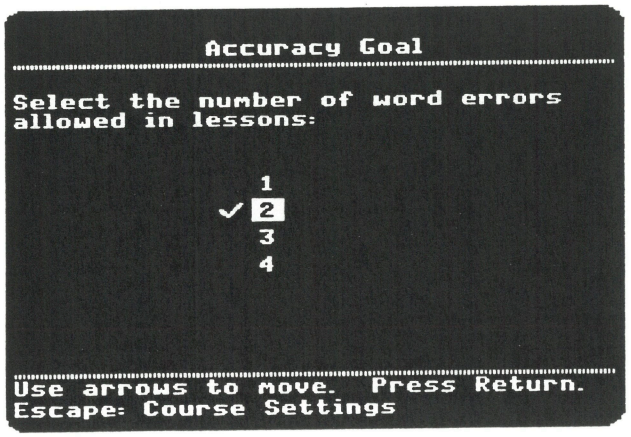


Selecting the Course Settings option from the Management Options menu will bring you to the Course Settings menu. You may set the speed goal, accuracy goal, language level, and mastery level.



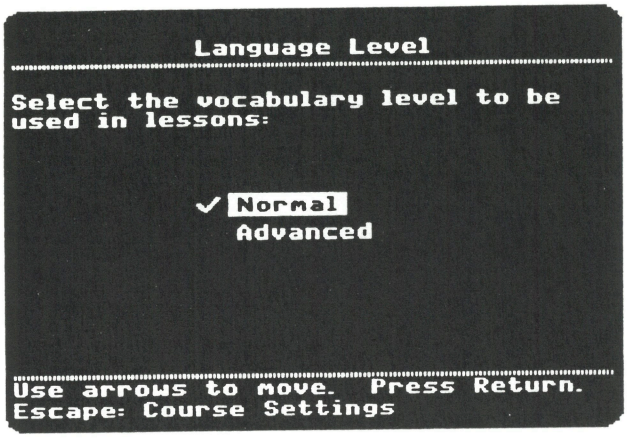
You may set the speed goal from 5 to 40 words per minute. The default is 5 and that is the recommended setting.

The speed goal is a performance ceiling. Progress through the lessons depends on matching or exceeding your speed goal. A new speed goal is not reset if performance exceeds the original speed goal.

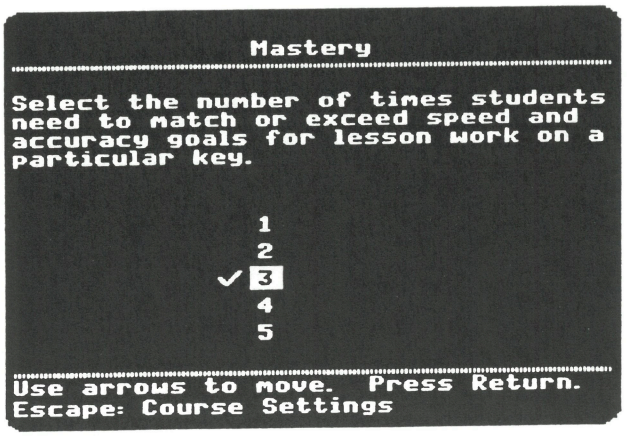


You may set the accuracy goal from 1 to 4 errors. The default is 2 and that is the recommended setting. When the accuracy goal is set to 2, you can make two mistakes in a line of text and still progress to the next lesson item.

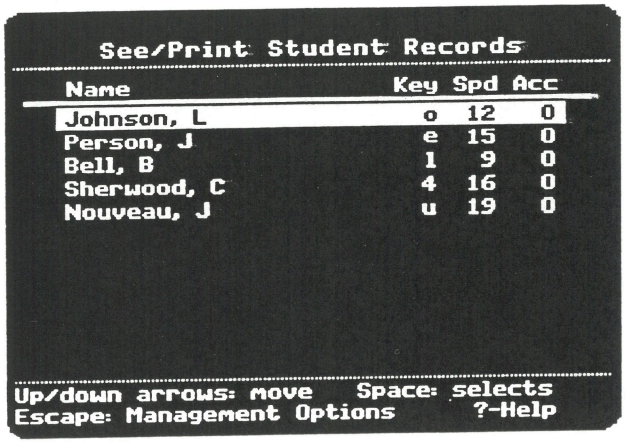
An error is counted for each word. If more than one keystroke error occurs within one word, it still counts as only one error.



You may set the language level. There are two settings: normal (for third- to fourth-grade students) and advanced (for fifth- to sixth-grade students).

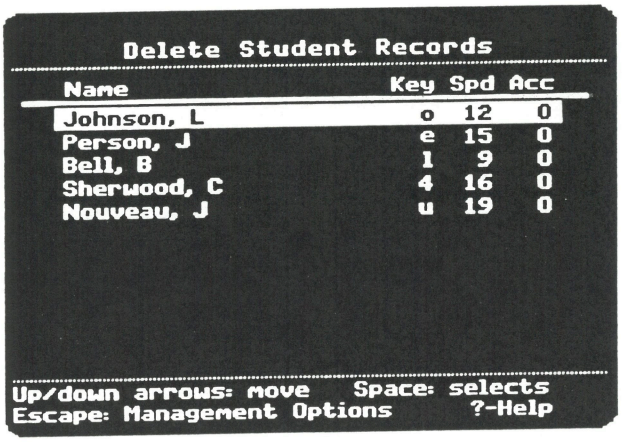

Mastery
Select the number of times students need to match or exceed speed and accuracy goals for lesson work on a particular key.
1
2
✓ 3
4
5
Use arrows to move. Press Return.
Escape: Course Settings

You may set the mastery level. This specifies the number of words and/or sentences that students will have to type to meet the speed and accuracy goals.


See/Print Student Records
Name Key Spd Acc
Johnson, L o 12 0
Person, J e 15 0
Bell, B 1 9 0
Sherwood, C 4 16 0
Nouveau, J u 19 0
Up/down arrows: move Space: selects
Escape: Management Options ?-Help

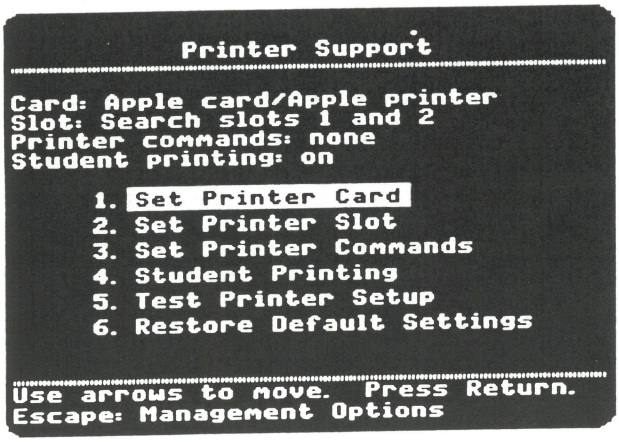
If you select Option 2 from the Management Options menu, you will see all the student records stored on the current disk. A ***CommuniKeys*** disk holds up to 50 student records, each containing information on the student name, the current key and speed, and the best accuracy level.

The Up and Down Arrow keys scroll through the list of records. The Space Bar selects and de-selects student records. "?" calls the help screen. "A" selects all student records. "P" prints selected records.

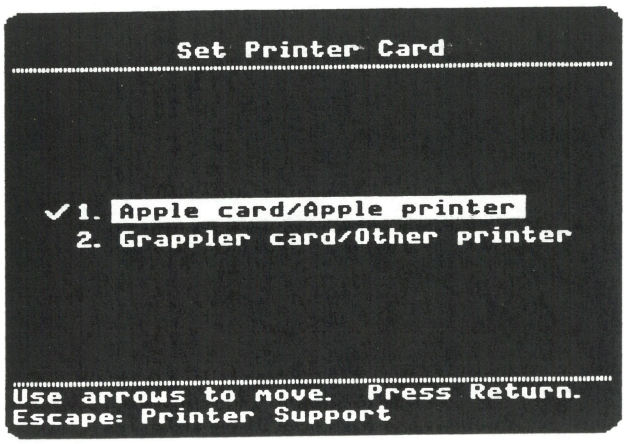

Delete Student Records
Name Key Spd Acc
Johnson, L o 12 0
Person, J e 15 0
Bell, B 1 9 0
Sherwood, C 4 16 0
Nouveau, J u 19 0
Up/down arrows: move Space: selects
Escape: Management Options ?-Help

If you select Option 3 from the Management Options menu, you will see the Delete Student Records screen. You can move up and down the list of records with the arrow keys and select students with the Space Bar. When you press the Return Key, you will be prompted to confirm that you want to delete the selected student records.

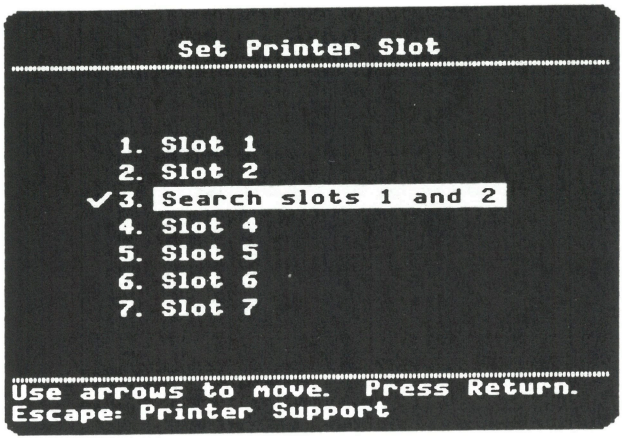
"NA" means "Not Applicable"—the student is still in the introduction lesson.



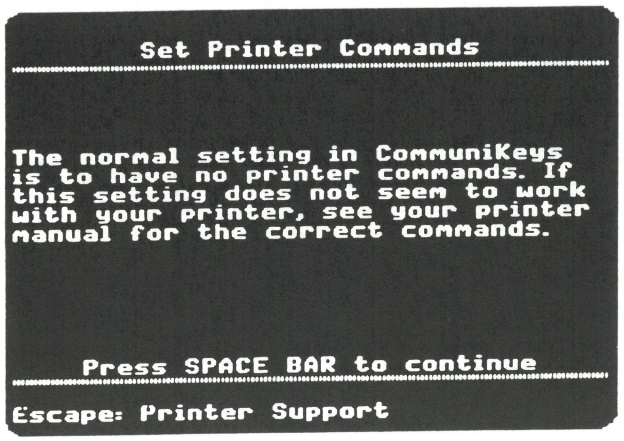
If you select Option 4, Printer Support, from the Management Options main menu, you will see the Printer Support menu, which allows you to select printer settings. You can turn off and on student printing; set the printer slot, card, or commands; test the printer setup; and restore the default settings.


Set Printer Card
✓1. Apple card/Apple printer
2. Grappler card/Other printer
Use arrows to move. Press Return.
Escape: Printer Support

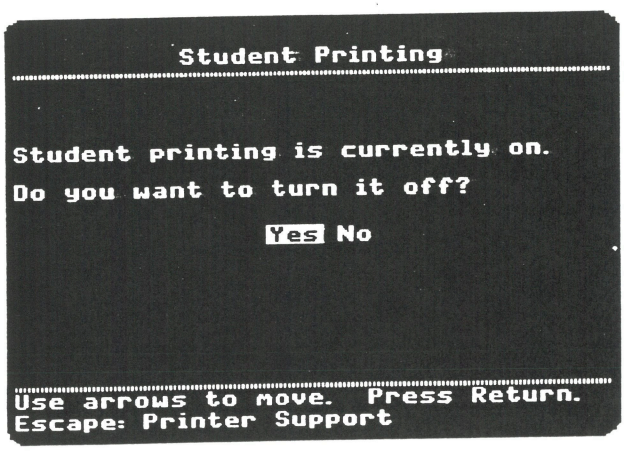
If you select Option 1, Set Printer Card, from the Printer Support menu, you can specify the printer card in your computer.



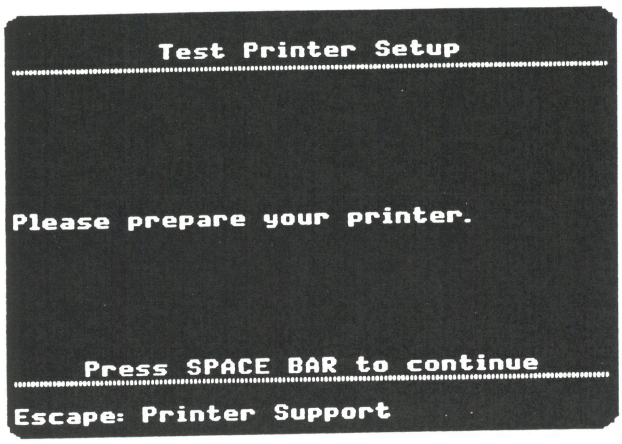
If you select Option 2, Set Printer Slot, from the Printer Support menu, you can specify the printer slot of your printer.


Set Printer Commands
The normal setting in CommuniKeys is to have no printer commands. If this setting does not seem to work with your printer, see your printer manual for the correct commands.
Press SPACE BAR to continue
Escape: Printer Support

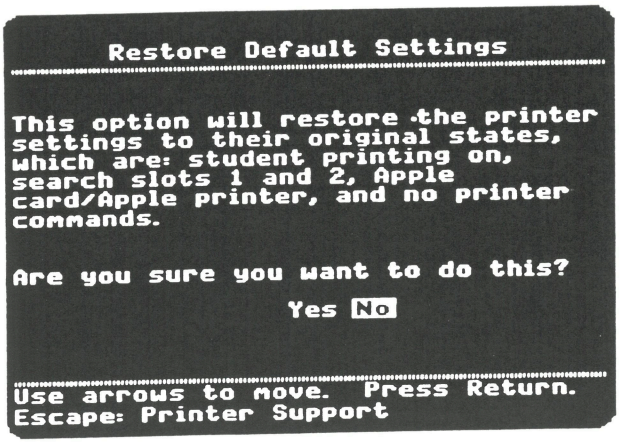
If you select Option 3, Set Printer Commands, from the Printer Support menu, you can specify the printer commands sent to your computer. Setting printer commands is as easy as typing the keys that need to be sent. For example, if you have an Escape character, you need only press the Escape Key. There is no need to spell out the words "escape" or "control" or other printer commands.


Student Printing
Student printing is currently on.
Do you want to turn it off?
Yes No
Use arrows to move. Press Return.
Escape: Printer Support

If you select Option 4, Student Printing, from the Printer Support menu, you can turn printing off. We recommend that you keep the printing on.



If you select Option 5, Test Printer Setup, from the Printer Support menu, you can test your printer with the current settings you have specified. Make sure your printer is on, has the proper cables connected to the computer, and has paper in it.


Restore Default Settings
This option will restore the printer settings to their original states, which are: student printing on, search slots 1 and 2, Apple card/Apple printer, and no printer commands.
Are you sure you want to do this?
Yes No
Use arrows to move. Press Return.
Escape: Printer Support

You can restore *CommuniKeys'* original printer settings if you select Option 6, Restore Default Settings, from the Printer Support menu.

ANSWERS TO QUESTIONS

Q. May I use my own materials in *CommuniKeys*?

A. Yes and no. You can't use your own materials in the lessons that practice each key. There are many places where your students can practice typing content vocabulary from your class. They can type spelling words or vocabulary in Scratchpad or Listmaker and can use many activities as mini-word processors. Students always have access to the Scratchpad, where they can type a screenful of text, time their typing, and print it out. You can use Scratchpad for group instruction, timed writings, and timed tests using your own materials, textbooks, or other typing materials.

Q. How many hours of instruction does it take to finish *CommuniKeys*?

A. We don't know because progress in lessons depends on several factors. First, progress depends on student performance. Students who consistently match speed and accuracy goals at the required mastery level will progress faster than students who have more problems. Second, progress depends on how practice is scheduled. Students who use ***CommuniKeys*** once a week for 20 minutes, for example, will not progress as steadily or consistently as students who use ***CommuniKeys*** daily. Third, progress depends on the course settings in the Management Options. If the speed or accuracy goals are set high for your students' skills, there will be a performance plateau at which students will not progress at a "normal" rate. If the mastery level is set low, students will be introduced to the keys more quickly, but will not perform as well. If the mastery level is set high, students will be introduced to the keys more gradually, but will have improved performance. Using the default settings, most students can progress from one key to the next in less than a 20-minute period.

Q. May I use *CommuniKeys* after all the keys are introduced?

A. Yes, students can continue working to build speed and accuracy after all the keys have been introduced. When students have finished learning all the keys and have completed a passport form and journal entry, they see their certificate. When students press the Space Bar after they see their certificate, and any time students select the **Lessons** program from the main menu after that, they go back into "continued use" lessons.

In continued use, students are given randomly selected words and sentences. Students practice these with a goal that is first two words faster than the goal speed set in Management Options. Students need to complete four words and four sentences at the goal speed. With each item that meets or exceeds the new speed goal, students learn an element of their new expedition. After the last sentence, students again see their certificate, now updated with the new information on their current expedition and the number of expeditions they have gone on. There are 30 expeditions in ***CommuniKeys***. If students started at ten words per minute (wpm) and went on five expeditions, their goal speed would be 18 wpm.

ANSWERS TO QUESTIONS (continued)

Q. Why can't students save their files in Activities?

A. ***CommuniKeys'*** major emphasis is on keyboarding. Students should practice typing as much as possible. They can print any of the text that they have composed in the **Activities** program. When students need to save and revise compositions, they should be introduced to a word processor.

Q: Will students go through the lessons at the same pace?

A: No, ***CommuniKeys'*** lessons are designed for self-paced, guided practice. Students have different rates of learning keyboarding. Let each student go at his or her own rate.

Q: Why are *CommuniKeys'* lessons organized as they are?

A: After the home row, new keys are introduced based on the frequency of occurrence in written English and the ability to form high-frequency words.

Q: How should I schedule keyboarding sessions?

A: An ideal schedule would have daily practice during the first two weeks and then practice on two or three days a week. There aren't, however, many elementary programs where this is possible. Regularly scheduled sessions over a semester would be better than a week or two of intensive practice. Sessions should be for 20 to 30 minutes, but not longer.

Q: What advice should I give students?

A: In general, you can focus on four areas of advice and feedback:

- Correct Fingering. Incorrect fingering slows speed and increases errors. Tell students, "Know which finger to use and how to move before you type a key. Keep your fingers on the home row. Use a light touch. Don't use heavy fingers."
- Saying the Letters. Saying each letter helps students associate keys with movements. Tell students, "Say each word before you type it. Say each letter to yourself as you type its key."
- Speed, not Accuracy. Focusing on speed helps students associate letters with finger motions. Students have a natural tendency to want to correct every mistake, and ignoring mistakes is often contrary to what students have learned.

You'll need to remind students that making mistakes is OK. Tell students, "Practice typing a little faster than feels comfortable, even if you make a few errors. But, don't type so fast that you make mistakes in nearly every word. Don't stop to correct every mistake."

- Looking at the Keyboard. New students can't tell by "feel" if they've typed the right key. "Feel" happens slowly as students associate what they see with what they feel. At the beginning, you have to look to learn. Encourage students to move from looking often to glancing occasionally at the keyboard. "Peeking" is OK. Tell students, "You can look to find a key, but look back at the computer screen before you type the key. The less you look at the keyboard, the faster you'll type."

Q. How do I access the Management Options?

A. You access the Management Options by pressing Control-A when you see the main menu on the screen.

Q. Should I change the Management Options' original settings?

A. We include the ability to change the settings because some teachers may wish to have the lesson presented differently or some students may require a different approach.

Q. How do I see the student records?

A. At the main menu, press Control-A to enter the Management Options, and then choose the See/Print Student Records option. See pages 19-23 for information on Management Options and student records.

Q. Do my students need a data disk for *CommuniKeys*?

A. No, there is room on each program disk for 50 student records.

Q. How should I manage *CommuniKeys*' disks?

A. Management Options affect the disk and all student records on it. So, we recommend that you make sufficient copies of disks for each variation of Management Options that you intend to use.

Student records are kept on a single disk. So, student disks should be organized by Management Options and student records. That is, you should make sure that "John," in third grade, is using a disk with his student record and with the same Management Options each time. The student record keeps track of which key "John" is on and what the course settings are. If you change the Management Options for one student, you affect all the students on that disk. Clearly organize student disks by making sure that student names are on the disk cover and that disks are stored by class and name.

Q. Will *CommuniKeys* work on my network?

A. Yes, ***CommuniKeys*** works on AppleShare, Velan, Corvus, and Digicard networks.

If you are working on a network, you will want to "crossload" separate copies (using the ***MECC Crossloader***) for each setting of ***CommuniKeys*** that you will use. If you have, for example, 100 students using ***CommuniKeys***, you should create a copy for each grade or group of 50 students and identify that copy by a unique name. No matter how many students use ***CommuniKeys***, that file will not increase as more student records are added. The space for 50 student records is small (1,700 bytes) and is "pre-allocated," so student records will not increase the size of the file.

USE IN AN INSTRUCTIONAL SETTING

CommuniKeys and Your Language Arts Program

CommuniKeys is designed to support your language arts program, but its instructional focus is on keyboarding, not language arts. It uses only real words from appropriate grade ranges. Its typing sentences are based on an expedition theme that puts meaning in a context, and it provides several activities that introduce writing. The activities can be used as tools for other classroom use. It supplies students with expeditions that can be used with writing and research projects and can serve as springboards to creative and expository writing.

Research has shown that your students' language arts skills will improve as they practice typing real words and natural language. While they are practicing keyboarding, they will be exposed to, and type, hundreds of words they have probably already had as spelling or vocabulary words. Typing from text like this will reinforce spelling and composing skills. Expeditions will expose students to new places and ideas and should excite them to do imaginative and expository writing. We also hope the expeditions spark an interest to learn more and will lead such resources as encyclopedias, maps, almanacs, and other reference materials. Expeditions can also be used as themes for additional fiction reading.

Keep in mind that ***CommuniKeys***'activities are not meant to replace a word processor. They are meant to support the acquisition of keyboarding skills by giving students an opportunity to practice keyboarding with purposeful, communicative activities. ***CommuniKeys***'activities are not like a word processor in many respects. Students cannot save or load files, copy or paste, or reformat text. We urge you not to introduce word processing until students have been introduced to the keyboard. When students are ready to do work in a writing process program of creating, editing, revising, and saving and loading documents, you will want to move them to a word processor.

CommuniKeys does not evaluate the composing that students do in activities. Activities do not require a specific amount of writing, evaluate the use of vocabulary, check for spelling, or analyze the typing production during activities. Writing activities are too important to be judged by a computer. They should be evaluated by other students or by the teacher. Typing speed is not as relevant in composing text as it is in straight copy typing. If a student thinks or pauses to compose while typing, the typing rate is significantly slower than straight copy typing. Is this bad? No, tracking typing speed in composing activities would seem to penalize students for thinking.

Preparing Your Students for *CommuniKeys*

You may want to introduce your students to keyboarding before introducing them to ***CommuniKeys***. You can copy the sample keyboards on pages 34 and 35.

You will want to show your students the layout of the keys. It is interesting to note that the "QWERTY" keyboard was actually designed to slow down typists on early typewriters that jammed and broke if typed on too quickly. You may also want to compare the layout of keys to the alphabetic order and discuss why the keyboard is not laid out alphabetically.

You will want to show students the home row position. There will be some students whose hands are too small to make all the reaches comfortably. You should emphasize the ease of typing when all your fingers have a "home" location. You can introduce which fingers type which keys and quiz students with such questions as, "Which finger types the "a" key?" and "Where is home for your right index finger?" You can also have students guess which finger might type certain keys.

You will want to identify the command keys: the Return, Delete, Escape, and Open Apple Keys and the Space Bar. You can ask for examples of how these keys are used. If they have had any exposure to computers at all, your students will probably have several examples of how each is used. You will also want to introduce the Shift Key and explain how pressing it changes the key that is struck.

When you have introduced the keyboard, you may want students to practice several activities where you "call the key" and the students strike the appropriate key. Students can practice on paper keyboards, typewriters, or computers.

After you have done any introductory activities, you may want to introduce ***CommuniKeys***. You can tell your students that with ***CommuniKeys*** they will be introduced to the keyboard and will have activities that practice typing. You should tell students then if you plan to collect any work they do in the "Activities" section. You should also introduce them to the expeditions. Each student will likely have a different expedition. They will find out only one piece of information at a time and will learn all the information when they have completed all the keyboarding lessons. Remember that in using the **Lessons** program, students will not have to keep track of what lesson they are on; the computer will do that for them. All they have to do is select the Lessons option from the main menu to return to the key they were last learning.

You may also want to emphasize that the keyboarding program is not a race, that students will progress at different rates, that the program remembers each student's speed and progress, and that students will have widely different skills in keyboarding speed and accuracy. The goal of the program is to introduce students to the keyboard. To compensate for the slower speeds that some students are likely to have, emphasize the quality of their written work in activities.

Using Activities in Your Language Arts Program

The ***CommuniKeys*** activities and expeditions are designed to introduce your students to writing with some very simple tools. Remember that after students have "earned" an activity, they have access to that activity any time from the main menu. This means that you can have students use activities to complete a language arts assignment before they begin their lessons. Writing activities such as What Can It Be?, Listmaker, Starters, Letter, and Stories have a wide range of applications. What Can It Be? and Starters can be used for creative writing and sentence structure exercises. Listmaker can be used to introduce students to simple outlining. Letter and Stories can be used with activities in your language arts book or for creative writing.

We suggest that the students print out their activities so that you can see them at your convenience and so that their work can be shared with other students, placed on bulletin boards, or stored for parent-teacher conferences.

Although not every student will have access to all of the same activities at the same time, all students have the Scratchpad available to them at any time. So, the kinds of activities in your reading, writing, or language arts programs can be supported by simple editing tools in ***CommuniKeys***. For example, when all students have access to Listmaker, you might assign them an extra activity of going to the Listmaker and making a list of books or spelling words or using the generic My List, which you can use for any purpose.

You can take advantage of the tool-like capabilities of many activities when your reading, language arts, or skills workbook unit has:

- friendly and persuasive letter writing (use Letter to write them);
- vocabulary studies (copy the words in Scratchpad or Listmaker);
- CLOZE or context clue exercise (copy the sentences in Scratchpad or Listmaker); and
- pre-writing activities (use What Can It Be?, Listmaker, Letter, and Stories).

Using Expeditions in Your Language Arts Program

Expeditions have several purposes: for student motivation and reward, for a thematic method of introducing keyboarding, and for writing and researching themes. We don't mean to suggest that expeditions should be the subject of research papers but that they can be used for short reports, additional practice with the encyclopedia, and factual and imaginative writing activities. Students don't have to know more about the expedition than is listed in the expedition form, but each of the expeditions is based on actual research expeditions sponsored by Earthwatch, a non-profit organization in Watertown, MA.

Expeditions can also be used for oral reports and discussions. As students encounter information about expeditions, they may naturally want to share their experiences. Each student will likely have a different expedition. There are 30 expeditions in ***CommuniKeys*** and each student is randomly assigned one. We did this so that a faster student's progress would not ruin the anticipation for students moving at a slower pace and so that students would have something unique to share with other students.

Expeditions can be used as springboards for other writing activities. You can use individual expeditions as "themes" for continued expository and creative writing. For their journals, students can select factual or imaginative questions. The questions reflect the two ways in which expeditions can be used for other writing activities. Because the expeditions are based on actual places, there is a connection with reference materials such as encyclopedias, maps, almanacs, and dictionaries, as well as novels and other works of fiction related thematically. Because students can imagine these expeditions, they have opportunities to write creatively about their adventures.

USE IN AN INSTRUCTIONAL SETTING (continued)

You can take advantage of the thematic nature of expeditions in several ways, including the following:

- Create a world map bulletin board with pins or flags to mark expedition locations.
- Add to the bulletin board selected student writings from the journals.
- Assign writing activities—reports, stories, or poems—based on student expeditions.
- Encourage reading in areas of expeditions, explorations, and scientific research.
- Have student groups plan their own expeditions, deciding where to go and what to study.

Appendices

A NOTE TO PARENTS

As part of your child's introduction to the computer, he or she will be introduced to touch-typing on the computer keyboard using MECC's instructional software program ***CommuniKeys***. This program helps students practice keyboarding with words and sentences and writing activities.

As your child learns more about typing, he or she will be preparing for an imaginary expedition. This expedition is based on real research conducted somewhere in the world. If your child begins to ask you about Giant Clams of Tonga or Lemon Shark, you'll know that it's because of ***CommuniKeys***. As your child continues to grow and master keyboarding, he or she will go on other expeditions. The expeditions give a purpose for keyboarding and help motivate children to acquire more and better skills.

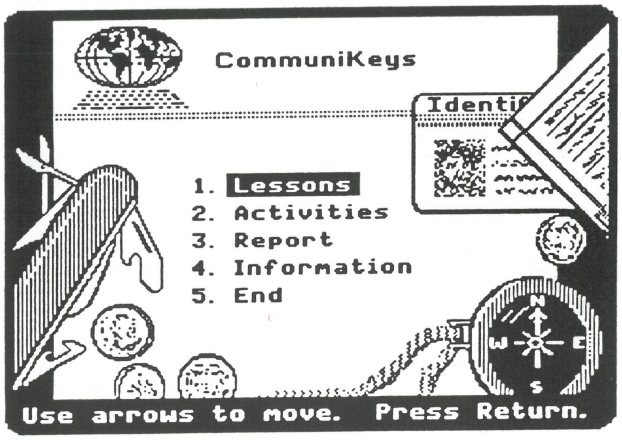
CommuniKeys helps students learn about typing and, at the same time, reinforces their language skills because ***CommuniKeys*** uses only real words and sentences. Students will also be introduced to some writing and language arts activities.

Please ask your child about this week's keyboarding lessons. Find out what letters he or she is working on. If you have a typewriter or a computer at home, let your child practice on it. This extra help at home will mean greater success at school.

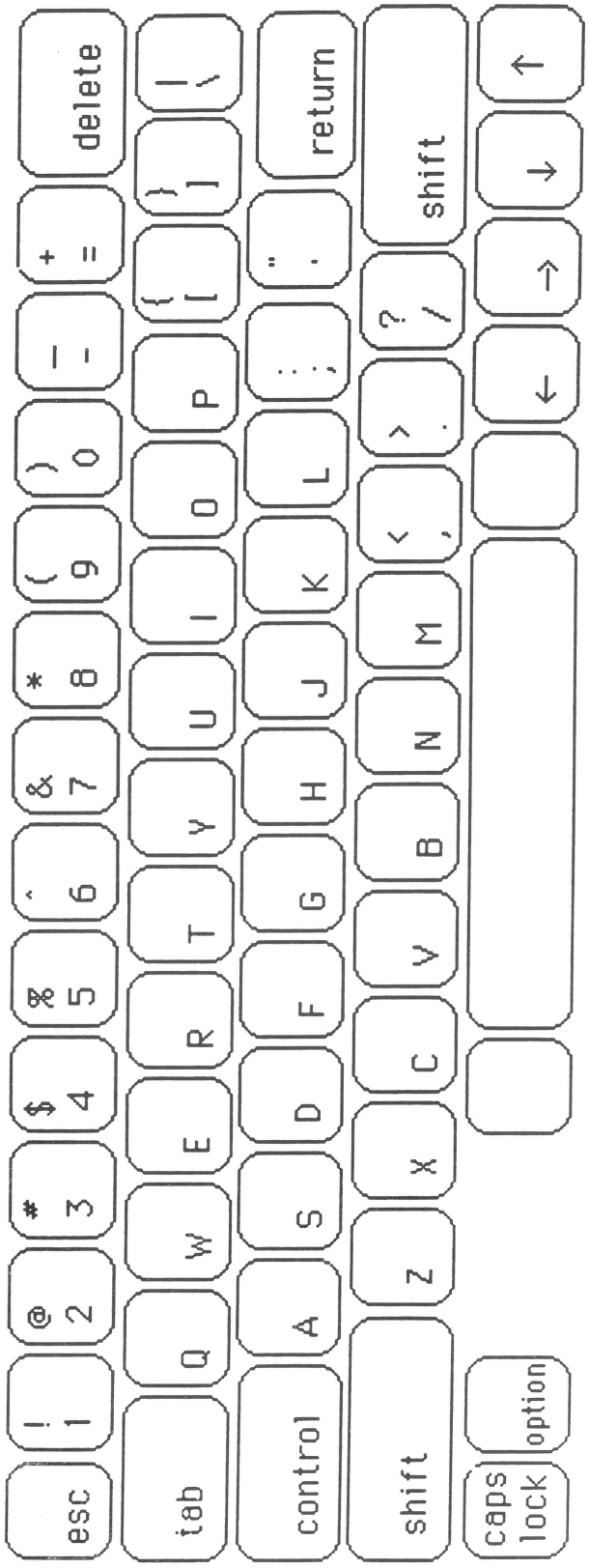
Sincerely,

_____

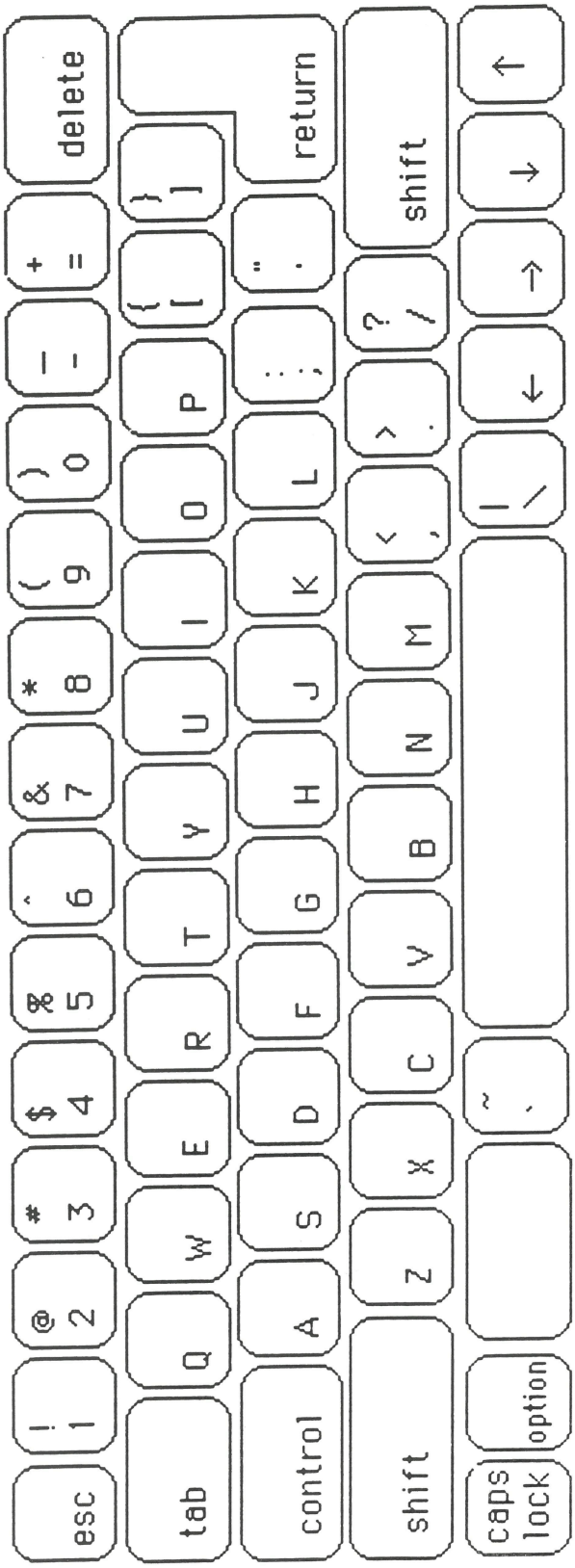
Your child's teacher



SAMPLE KEYBOARD



SAMPLE KEYBOARD



EARTHWATCH EXPEDITIONS

The expeditions described in ***CommuniKeys*** are actual expeditions sponsored by the non-profit institution, Earthwatch. Earthwatch expeditions are all supervised by a researcher connected to a university or research program. All participants in Earthwatch expeditions volunteer to help with these important research projects and pay for their own room and board.

According to the *"Earthwatch: the President's Report 1986 & 1987,"*

> "Earthwatch is a company of scholars and citizens working together. Its members sponsor research expeditions, sharing both the costs and the labors of field work. Earthwatch supports the efforts of scholars to preserve the world's endangered habitats and species, explore the vast heritage of its peoples, and promote world health and international cooperation. By making these efforts accessible to citizens, Earthwatch strives to increase public understanding of science and to expand our knowledge of the Earth and its inhabitants. Earthwatch is a non-profit, tax-exempt organization. Founded in 1971, it has to date mobilized 1,000 research expeditions in 79 countries, providing researchers with 20,000 volunteers and more than $12 million in funds and equipment. "

If you would like information about Earthwatch research expeditions or teacher fellowships or would like a catalog, write to:

Earthwatch
680 Mount Auburn Street
Watertown, MA 02272
617/926-8200.

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CREDITS

The **Reading Management System Correlation Guide** was developed by a MECC team that included Miryam Acevedo-Bouchard and Eileen Wilkie.

The format for the **Reading Management System Correlation Guide** is based on the **Reading Textbook Connection,** a product in the **MECC Reading Collection** developed by a MECC team that included Miryam Acevedo-Bouchard and Sheila Dols.

TheSB&G Reading Program is a reading textbook series published by Harcourt Brace Jovanovich, 1987. The content listed in the **RMS** Curriculum Stream is derived from the SB&G Reading Program Textbook Series.

TO THE READER:

MECC has made every effort to ensure the instructional and technical quality of this manual. Your comments—as user or reviewer—are valued and will be considered for inclusion in any future version of the product. Please address comments to:

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Q. *What exactly does the law say about copying software?*

A. The law says that it is illegal to make or distribute copies of copyrighted material, including software, without authorization. If you do so, this is piracy, and you may face not only a civil suit, but also fines of up to $100,000 and jail terms of up to 5 years.

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Q. *But aren't schools allowed to make copies for educational purposes?*

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Q. *At our school, we share programs all the time. We assume this must be okay, since the school purchased the software in the first place.*

A. Many educators are not aware of how the copyright law applies to them. Without the publisher's authorization to make copies, your school needs to purchase as many copies of a program as you will use. However, many software firms do offer special sales arrangements to schools. These include reduced priced lab packs (a number of programs sold together) and site licenses (arrangements which permit schools to copy for a specific location at a fixed price). **Because these arrangements vary from publisher to publisher, it is essential that you read and understand the license agreement for each program before making any copies.**

Q. *We're planning to install a network for our students. How do we know how many copies of software we'll need to purchase?*

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Q. *I've read the license agreement for one of the software packages purchased by our school. What if I'm not sure that I understand the arrangement correctly?*

A. If you have trouble understanding the license agreement, help is available. Your school district's media or computer specialist may be able to answer your questions. In addition, you can always contact the software publisher and ask for a clarification of the license agreement as it applies to your school. Finally, if you still have questions, contact the Software Publishers Association for more information about software and the copyright law.

Q. *I'll bet most of the people who copy software don't even know they're breaking the law.*

A. Because the software industry is relatively new and because copying software is so easy, many people are either unaware of the laws governing software use or choose to ignore them. It is the responsibility of each and every software user to read and understand the license agreements of the products they use and to be sure that their software use complies with copyright law. See what you can do to initiate a software use policy statement in your school that everyone respects. Finally, as an educator, help set an example for your students that responsible computer users should be "software legal."

If you have any questions about how the copyright law applies to you and your school, please contact the **Software Publishers Association at 202-452-1600.**

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